## **REMARKS**

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 19-43 were pending. By the present response, claim 19 has been amended and claims 41-42 canceled. Thus, upon entry of the present response, claims 19-40 and 43 are pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: paragraphs [0046] - [0047]; and the original claims.

Entry of the forgoing is appropriate pursuant to 37 C.F.R. §1.116 for at least the following reasons. First, the amendments raise no new issues that would necessitate further search and/or substantive reexamination. Claim 19 has been amended in a manner such that it corresponds in scope to existing claim 42. Second, the amendments place the application in better form for an appeal.

## CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 19-21, 23-25, 27-34, 35-40, and 42 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,102,846 (hereafter "*Bentley et al.*") on the grounds set forth on page 2 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to a process for preparing polyamide particles which advantageously benefits from the use of mild temperatures, thereby

making it possible to avoid potential degradation of the polyamide material, and also makes it possible to obtain substantially spherical particles having a satisfactory size distribution.

A process performed according to the principles of the present invention is set forth in amended claim 19. Amended claim 19 recites:

- 19. A process for preparing spherical polyamide particles having a mean diameter of less than 1 mm, comprising the following steps:
- a) preparing a dispersion of a first liquid which comprises polyamide monomers, in a second inert liquid thereby forming a reaction medium, the reaction medium comprising two phases, a continuous phase formed by the second liquid, and a dispersed phase formed by the first liquid, the first and second liquids are essentially immiscible;
- b) polymerizing the monomers by polycondensation and/or polyaddition by heating the reaction medium and maintaining the heating at a temperature below the melting point of the polyamide with the desired degree of polymerization;
- c) optionally, decompressing the reaction medium to atmospheric pressure;
- d) optionally, gradually cooling the reaction medium; and
- e) recovering the spherical polyamide particles therefrom.

By the present response, claim 19 has been amended in a manner which incorporates the limitations contained in previously presented claims 41 and 42 therein. In this regard, it is noted that claim 42 depends from claim 41. While the grounds for rejection allege that claim 42 is anticipated by *Bentley et al.*, the grounds for rejection fail to allege that the limitations recited in claim 41 are anticipated by

Bentley et al. Therefore, the above-noted grounds for rejection have been obviated by the present amendment to claim 19.

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Example 1 of *Bentley et al.* is cited in support of the grounds for rejection. However, in Example 1 of *Bentley et al.*, aliphatic hydrocarbon, polyamide monomers and a copolymer dispersant are blended, then additional dispersant and aliphatic hydrocarbon are added again, and finally polymerization occurs. Since the dispersing agent is soluble in the inert organic liquid (as mentioned in col. 1, lines 67-68 of *Bentley et al.*), any first and second liquid, as defined in claim 19, cannot be considered as immiscible according to the teachings of *Bentley et al.* By contrast, as evident from amended claim 19 above, the presently claimed invention requires polymerization of polyamide in a first and second phase system comprising a dispersed phase of a first liquid comprising polyamide monomers into a continuous phase of a second inert liquid, with the first and second liquids being essentially immiscible. Thus, for at least these additional reasons, *Bentley et al.* fails to anticipate amended claim 19.

In addition, *Bentley et al.* is directed to stable dispersions of polymer particles contained sub-particles of a solid modifying agent and related processes related thereto. As evident from the above, claim 19 requires, *inter alia* "preparing a dispersion of a first liquid which comprises polyamide monomers" (emphasis added). By contrast, *Bentley et al.* fails to disclose preparing such a dispersion. The polymer materials described in association with Example 1 are copolymers and therefore fails to satisfy at least this aspect of claim 19. Claim 19 also requires the preparation of a dispersion of a first liquid and a second liquid. *Bentley et al.* fails to clearly disclose that the dispersion of a first liquid and second liquid is ever formed. In particular,

with respect to Example 1, the only apparent dispersion appears to be solid particles within a liquid phase. This dispersion fails to satisfy the requirements of claim 19. Furthermore, claim 19 requires polymerization of the reaction medium formed by the dispersion of the first liquid and the second liquid. By contrast, *Bentley et al.* clearly fails to disclose such a polymerization step.

Thus, for at least the reasons noted above, *Bentley et al.* clearly fails to anticipate the process as set forth in amended claim 19. The remaining claims depend either directly or indirectly upon claim 19. Thus, these claims are also distinguishable over *Bentley et al.* for at least the same reasons noted above.

## CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 19-21, 23-25, 27-34, and 35-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,127,513 to Ohara et al. (hereafter "*Ohara et al.*") on the grounds set forth on page 4 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

As noted above, by the present response, claim 19 has been amended in a manner which incorporates the limitations of claims 41 and 42 therein. Since these claims have not been rejected on the basis of *Ohara et al.*, the above-noted grounds for rejection has been obviated.

Claims 22 and 32-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Bentley* in view of U.S. Patent No. 3,446,782 (hereafter "*Okazaki et al.*") on the grounds set forth on page 4 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

As previously noted, claim 19 has been amended in manner which incorporates the limitations of claims 41 and 42 therein. Since these claims have not

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been rejected on the basis of Bentley et al. in view of Okazaki et al., the above-noted

grounds for rejection have been obviated.

Claims 19-22, 25-27, 35-41, and 43 stand rejected under 35 U.S.C. §103(a)

as being unpatentable over WO 01/68235 to Montasser (cited as equivalent U.S.

Patent Application Publication No. 2003/0059473 to Montasser) (hereafter

"Montasser") on the grounds set forth on page 6 of the Official Action. For at least

the reasons noted below, this rejection should be withdrawn.

By the present response, claim 19 has been amended in a manner which

incorporates the limitations of both claims 41 and 42 therein. Since claim 42 has not

been rejected on the basis of the teachings of *Montasser*, the above-noted grounds

for rejection have been obviated.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of

Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it

is requested that the undersigned be contacted so that any such issues may be

adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

**BUCHANAN INGERSOLL & ROONEY PC** 

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